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ARTICLE

BeSiDe time to move behavior support in dentistry from an art to a science: A position paper from the BeSiDe (Behavior Support in Dentistry) Group

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Abstract

Aims: To share the need for agreement in terminology around how people are supported to receive dental care.

Method: In this position paper, we make the case for a shift in behavior support in dentistry from an art to a science.

Results: We outline why we need agreement on the definition of behavior support across dentistry, agreement on underlying theory, aims and values, and why we need agreement on terms for specific techniques.

Conclusions: We share how patients and dental teams can benefit through better science, education and practice of dental behaviour support.

KEYWORDS

behavior management, hospital dentistry, pediatric dentistry

1 | POSITION STATEMENT

When anyone engages with healthcare, they do so from a unique position. As a result, the way that healthcare is

experienced will lead to a unique set of emotive, cognitive, and behavioral responses that vary from person to person and setting to setting.¹ When it comes to dental treatment, there is obvious and universal potential for this to be

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experienced as invasive, intimate, aversive, or painful. Anecdotally, there is a perception that undergoing dental treatment may be an experience that can be undermined by fear, cognitive differences, communication impairment, self-regulatory difficulties, or behavioral challenges. For this reason, there is a need for strategies that dental teams and patients can use together to make the experience and outcomes of dentistry better.

This need has propagated a range of techniques, often termed Behavior Management Techniques, a term that decidedly invokes a medical model of health and disability. These techniques are categorized, for the want of a richer language, as “pharmacological and non-pharmacological”, “accepted or controversial”, or “basic and advanced”.^{2–4} These techniques are applied to varying degrees, and in combination, for all people receiving dental care but are most useful when dental care is potentially challenging due to a combination of patient, treatment, or operator factors. In the absence of an authoritative set of techniques, principles and teaching, many dental teams have developed such strategies themselves, often through creative processes of trial and error. This has led to an art rather than a science of patient support in dentistry,⁵ despite a clear need for precision and rigor in theoretical understanding, conceptualization, evidence-base, teaching, and clinical application. One major barrier in realizing this comes from a lack of agreement in defining and describing what we each do to support all patients across the continuum of care and across subspecialties within dentistry and behavioral sciences.

2 | WHY WE NEED AGREEMENT ON THE DEFINITION OF BEHAVIOR SUPPORT ACROSS DENTISTRY

At the interchange between dentistry and the behavioral sciences, problems can arise when scientists, educators, and practitioners from different fields fail to communicate using a mutually understood “language”. This can lead to problems like a single behavioral technique having two names and multiple techniques being described by the same term. This is sometimes referred to as the jingle jangle effect. A lack of standardized language impedes accurate definition, description, and replication of effective behavioral techniques, impeding translation of research to clinical care.⁶ In some fields of behavioral science, researchers have addressed these issues by generating consensus on the definition and active ingredients of various behavioral techniques. In doing so, they have succeeded in outlining a working framework that allows a common language across disciplines.⁶ While such a process may have drawbacks,⁷ their achievements have led to

game-changing advances in behavioral sciences. Equally, we do not suggest that behavioral interventions by dental teams are or should be considered as *Behavior Change Techniques*, successes like this boast potential for alignment of terminology in the field of dental behavior support too.

There is no definition, agreed term, or reliable catalogue that we can reliably and unequivocally describe, with any certainty, as “the group of strategies that we engage in as wider dental care professionals to help patients receive dental care”. Terms range from pediatric/education-oriented behavior management to behaviorist embedded behavior shaping or modification to behavior support, arising from the Positive Behavior Support paradigms of person-centered care and Applied Behavior Analysis.⁸ This lack of agreement impairs our ability to describe and share our practice and creates silos within disciplines when they need not exist.

While it is clear that behavior support is most pertinent when people struggle to cope with dental care, it is in fact all people who undergo dental care who will engage in the same process of regulating their response to the same triggers, albeit while experienced with varying intensity. Therefore, it is reasonable and desirable to describe a set of techniques that can be universally applied to all patients. This entails a need to engage across the spectrum of specialties (such as pediatrics, disability, and anxiety dentistry) and modalities (such as environmental, communication-mediated, pharmacological, and physical) to explore what unites and what sets them apart. Doing this, we believe, will bring about much needed clarity so that we will hopefully all end up speaking the same language and in doing so, best supporting our patients.

3 | WHY WE NEED AGREEMENT ON THEORY, AIMS AND VALUES

To secure consensus, it will be important to agree aims and underlying values. Does Dental Behavior Support aim to simply deliver better dental care? Is it to encourage a supportive relationship between patient and the dental setting? Is it to deal with the patient’s cognitive and emotional reactions to illness and subsequently the receipt of care? Or is it about delivering care with varying degrees of all the above?

Aims like these are likely universal but values become salient depending on the specific population. For example, consider people with communication impairments—should behavior support aim to teach and internalize coping skills or is behavior support a means of achieving a balance of human rights such as the right to health

and the right to autonomy? Or is achieving one a means of also achieving the other? To explore the purpose of behavior support, and achieve a unified underlying set of theories, values and aims, much work is needed in exploring multiple theoretical perspectives of behavior support.

4 | WHY WE NEED AGREEMENT ON TERMS FOR SPECIFIC TECHNIQUES

Once the basis is clarified, terminology for the broad fields of behavior support are also needed to allow specific and positive descriptions (i.e., environmental, communication based, physical and pharmacological) rather than resting on terms like basic/advanced or pharmacological/non-pharmacological. Within these fields it will then be possible to explore the scope for agreement on what might constitute separate behavioral support techniques their theoretical basis and secure common definition. We will seek agreement on what constitutes a behavior, whose behavior is it (the patient's or the clinician's) and how and why we think it is supportive. In understanding these parameters, we suggest it is important to be clear what the underlying components of the behavior support might be. We think that some fields lend themselves to such objective agreement more naturally than others. For example, pharmacological interventions are defined by drug, dose, route, and regimen, and these components tend to be communicated in a language that is nuanced yet widely agreed upon and understood. Whereas, other fields may be more difficult to standardize. As an example, consider the difference between acclimatization, desensitization, practice sessions, rehearsal, graded exposure, and systematic desensitization. These terms may be seen by some dental teams as broadly describing the same technique, while others like behavior change experts might see them as qualitatively different and distinct. Their theoretical bases are often unclear. It is the coming together of disciplines and agreeing a robust, evidence-informed framework that we want to achieve with this initiative.

Agreeing concepts, theory, and terminology are first steps in enabling research, education, and clinical care for all people who engage with dental care. A standardized language will enable accurate definition, description, and replication of effective techniques. It also opens options for clinicians as well as scientific synthesis in the field. Understanding why an intervention works will allow us to identify the active ingredients of behavior support techniques and accurate description will allow predictable effectiveness of evidence-based techniques in clinical practice and research. This has the potential of developing and disseminating effective simple interventions to every

dental practice thereby ensuring access and addressing inequalities.

For these reasons, the authors have formed the BeSiDe (Behavior Support in Dentistry) group to develop consensus on behavior support in dentistry. We seek a unifying taxonomy of behavior support across dental settings with clarity of underlying theory, aims, values, scope, and evidence base. We hope to develop consensus across experts in the field, and allow for the dental profession and science to align with other behavioral scientists and practitioners. In short, we aim to develop the field from an art to a science.

So, in closing we ask readers to reflect: What behavior support techniques are you practicing with your patients? Would another dentist recognize your techniques and call them by the same term? Which theories do you apply with your patients? What is the evidence base for the techniques that work well in your hands? Wouldn't you and your patients benefit from better science?


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CONFLICT OF INTEREST

The authors declare that they do not have any conflict of interest.

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REFERENCES

1. Leventhal H, Brissette I, Leventhal EA. The common-sense model of self-regulation of health and illness. In: Cameron LD, Leventhal H, eds. *The Self-regulation of Health and Illness Behaviour*. Routledge; 2003:42-65.
2. British Society of Paediatric Dentistry. Non-pharmacological behaviour management guideline, (revised 2011). Accessed June 25, 2021. Available from: <https://www.bsdp.co.uk/Portals/0/Public/Files/Guidelines/Non-pharmacological%20behaviour%20management%20.pdf>.
3. Clinical Affairs Committee, American Academy of Pediatric Dentistry. Guideline on behavior guidance for the pediatric dental patient. *Pediatr Dent*. 2015;37(5):57.
4. Roberts JF, Curzon ME, Koch G, Martens LC. behaviour management techniques in paediatric dentistry. *Eur Arch Paediatr Dent*. 2010;11(4):166-174.
5. Mac Giolla Phadraig C, Griffiths C, McCallion P, McCarron M, Nunn J. Communication-based behaviour support for adults with intellectual disabilities receiving dental care: a focus group study exploring dentists' decision-making and communication. *J Intellect Disabil*. 2019;23(4):526-540.
6. Michie S, Wood CE, Johnston M, Abraham C, Francis J, Hardeman W. Behaviour change techniques: the development and evaluation of a taxonomic method for reporting and describing behaviour change interventions (a suite of five studies involving consensus methods, randomised controlled trials and

- analysis of qualitative data). *Health Tech Assess.* 2015;19(99). 1–188.
7. Ogden J. Celebrating variability and a call to limit systematisation: the example of the behaviour change technique taxonomy and the behaviour change wheel. *Health Psychol Rev.* 2016;10(3):245–250.
 8. Lyons RA. Understanding basic behavioral support techniques as an alternative to sedation and anesthesia. *Spec Care Dentist.* 2009;29(1):39–50.

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